Double-Ended Shear Beam Load Cell for economical, no-compromise weighing

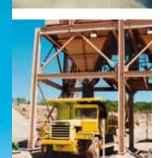


Double-ended Shear Beam Weighing

Use the SLD530 in applications requiring center loading to minimize sensitivity to off-center forces. The SLD530 offers an efficient solution by applying the shear beam weighing principle for moderate to medium capacity applications.

Robust Strain Gage Design

The SLD530 load cell uses a reliable strain gage design with excellent measurement stability. The high sensitivity output enables the use of economic weight indicators, providing a valuable low-cost solution.



Stainless Steel Construction

The SLD530 is available in capacities ranging from 5,000 lb to 250,000 lb. Each version is constructed of stainless steel to ensure good performance even in difficult industrial environments.



SLD530 Shear Beam Load Cell

Use the SLD530 when better corrosion protection is required in moderate to high capacity applications and weighing performance cannot be compromised. Every SLD530 load cell features:

- Reliable Strain Gage design
- Standard mechanical interface
- Robust design, Stainless Steel
- High output signal 3mV/V
- Tight combined error specification
- NTEP and Factory Mutual Certified
- IP67 Protection
- · Minimum sensitivity to off-center forces

SLD530's tight combined error specification is suitable for many industrial applications, while its high output signal permits the use of economic terminals and transmitters. Together, these features ensure the best possible system performance.



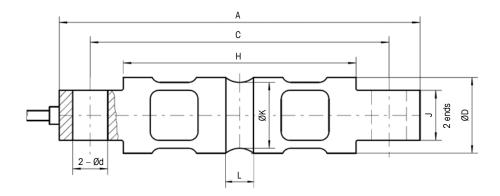
SLD530 Load Cell Specifications

Parameter		Unit of measure	Specification										
Model number								SLD530					
Rated Capacity (R.C.)		klb (t, nominal)	5 (2.2)	10 (4.5)	20 (9.1)	30 (13.6)	40 (18.1)	50 (22.7)	60 (27.2)	100 (45.4)	150 (68)	200 (90.7)	250 (113.4)
Rated Output		mV/V @ R.C.					3	.00 ± 0.1	%				
Zero load Output		% R.C.	≤ ± 1.00										
		% R.C.	≤ ± 0.02										
Repeatability Error		% F.S. ³⁾	≤ ± 0.01										
Creep, 30 minute		% F.S. ³⁾	≤ ± 0.03										
Townson the set of the	Min. Dead Load Output	% R.C. ⁴⁾ / °F	≤ ± 0.001										
Temperature effect on	Sensitivity2)	% A.L. ⁵⁾ / °F	≤ ± 0.0008										
Temperature range	Compensated	°F (°C)	14 to +104 (-10 to +40)										
	Operating	°F (°C)	-40 to +176 (-40 to +80)										
	Safe storage	°F (°C)	-40 to +194 (-40 to +90)										
NTEP Approval Cert, Class,	Nmax					10	0-098, CI	I/CIIIL, 5'	00/10/00	00			
Factory Mutual Approval			3036007										
	Recommended	V AC/DC	5 - 12										
Excitation voltage	Maximum	V AC/DC	15										
	Excitation	Ω	700 ± 7										
Terminal resistance	Output	Ω		703 ± 4									
Insulation resistance at 50 VDC		ΜΩ	> 5000										
Material	Spring Element		stainless steel										
Malenal	Cable		Polyurethane										
Protection	Туре		Potted with metal covers										
Protection	IP Rating		IP67										
	Safe	% R.C.	150										
Load limit	Ultimate	% R.C.						300					
Deflection @ R.C., nominal		in (mm)	0.10 (0.004)	0.12 (0.005)	0.16 (0.006)	0.13 (0.005)	0.15 (0.006)	0.16 (0.006)	0.18	0.20 (0.008)		0.18 (0.007)	
Weight, nominal		lb (kg)		(4)	3.3 (7.3)		8.5	(18.7)		12.1 (26.7)	14.5 (32)	41.2 (90.8)	43.4 (95.7)
Cable	Length	m (ff)	9.1 (30)										
	Diameter	mm (in)	5 (0.20)			8 (0.31)							

¹⁾ Typical error due to the combined effect of non-linearity and hysteresis
 ²⁾ Typical values only
 ²⁾ F.S. = Full Scale

²⁾ R.C. = Rated Capacity
²⁾ A.L. = Applied Load

SLD530 Load Cell Dimensional Drawing inch [mm]



Emax/Cap	A	C	H	ØD	J	Ød	ØK	L
5'000 - 10'000 lb	8.12 [206]	6.88 [174]	5.24 [133.1]	1.70 [43.2]	1.12 [28.4]	0.66 [16.7]	1.49 [37.6]	0.62 [15.7]
20'000 lb	8.12 [206]	6.88 [174]	5.24 [133.1]	1.95 [49.5]	1.12 [28.4]	0.66 [16.7]	1.49 [37.6]	0.84 [21.3]
30'000 - 60'000 lb	10.25 [260.4]	8.50 [215.9]	6.50 [165.1]	3.00 [76.2]	2.37 [60.2]	1.06 [26.9]	2.73 [69.3]	1.00 [25.4]
100'000 lb	11.25 [285.8]	9.50 [241.3]	7.49 [190.5]	3.50 [88.9]	2.50 [63.5]	1.06 [26.9]	3.24 [82.3]	1.25 [31.8]
150'000 lb	11.25 [285.8]	9.50 [241.3]	7.49 [190.5]	3.90 [99.1]	2.80 [71.1]	1.06 [26.9]	3.64 [92.5]	1.25 [31.8]
200'000 - 250'000 lb	16.10 [408.9]	13.00 [330.3]	10.0 [254.0]	5.38 [136.5]	4.6 [116.8]	1.56 [39.6]	5.18 [131.4]	1.30 [33.0]

SLD530 Load Cell **Order Information**

SLD530 Load Cell Cable Colors

Model Number	Item No.
SLD530 Load Cell, 5K, stainless steel	61042092
SLD530 Load Cell, 10K, stainless steel	61042093
SLD530 Load Cell, 20K, stainless steel	61042094
SLD530 Load Cell, 30K, stainless steel	61042095
SLD530 Load Cell, 40K, stainless steel	61042096
SLD530 Load Cell, 50K, stainless steel	61042097
SLD530 Load Cell, 60K, stainless steel	61042098
SLD530 Load Cell, 100K, stainless steel	61042099
SLD530 Load Cell, 150K, stainless steel	61042100
SLD530 Load Cell, 200K, stainless steel	61042101
SLD530 Load Cell, 250K, stainless steel	61042102

Function
+ Excitation
- Excitation
+ Signal
- Signal
Shield

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Quality certificate ISO9001 Environment certificate ISO14001

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